



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,403	12/12/2003	Richard Louis Arndt	AUS919990938US2	2116
35525	7590	02/08/2006	EXAMINER	
IBM CORP (YA)			TANG, KENNETH	
C/O YEE & ASSOCIATES PC				
P.O. BOX 802333			ART UNIT	
DALLAS, TX 75380			PAPER NUMBER	
			2195	

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/735,403	<b>Applicant(s)</b> ARNDT, RICHARD LOUIS	
	<b>Examiner</b> Kenneth Tang	<b>Art Unit</b> 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 11-24 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. This action is in response to the Amendment filed on 11/14/05. Applicant's arguments have been fully considered but were not found to be persuasive. Applicant's amendment prompted the new grounds of rejections.
2. Claims 11-24 are presented for examination.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 11-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noel et al. (hereinafter Noel) (US 2002/0016891 A1) in view of Arndt et al. (hereinafter Arndt) (US 2002/0010811 A1).**

4. As to claim 11, Noel teaches a method of providing separate copies of shared resources to each of multiple partitions within a data processing system, the method comprising:

receiving, at a hypervisor, a message (request) from a one of a plurality of operating system images, executing within the data processing system, intended for a shared resource ([0007]);

Art Unit: 2195

determining an identity of the one of the plurality of operating system images (can be identified from operating system instance ID) ([0051]);

transmitting the new message to an external data processing system for presentation to a user (passing messages over a communication network) ([0006]).

Noel fails to explicitly teach the hypervisor encoding the message and the identity into a new message in addition to the hypervisor being responsible for the determining and transmitting of the message. However, Arndt teaches a hypervisor decoding an encoded/incapsulated images onto a message stream that is transferred to a computer 480 ([0044] and [0045]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Noel and Arndt because it would improve data integrity, as shown in Arndt ([0007], *etc.*).

5. As to claim 12, Noel teaches wherein the shared resource is an operator panel ([0041]).

6. As to claim 13, Noel teaches wherein the shared resource is a system console ([0038]).

7. As to claim 14, Arndt teaches receiving external data from the external data processing system; decoding the external data to determine an input, an identity of the shared resource, and an intended one of the plurality of operating system images; and transmitting the input to the intended one of the plurality of operating system images with an indication the identity of the shared resource from which the input corresponds ([0044], [0045], [0009], *etc.*).

Art Unit: 2195

8. As to claims 15, they are rejected for the same reasons as stated in the rejection of claims

11.

9. As to claims 16-18, they are rejected for the same reasons as stated in the rejection of claims 12-14.

10. As to claims 19, they are rejected for the same reasons as stated in the rejection of claims

11.

11. As to claims 20-21, they are rejected for the same reasons as stated in the rejection of claims 2-3.

12. As to claims 22, they are rejected for the same reasons as stated in the rejection of claims

18.

13. As to claim 23, Noel teaches a system for partitioning shared resources (*Fig. 2, items 200, 208, 210, 212, etc.*), the system comprising:

a first data processing system (*Fig. 2, 200*) comprising:

a plurality of partitions each corresponding to separate one of a plurality of operating system images (operating system instances) (*Fig. 2, items 200, 208, 210, 212, etc.*);

a plurality of assignable resources ([0007]); and

a hypervisor for providing each partition a separate one of a shared system resource ([0007]-[0008]);

a second data processing system coupled to the first data processing system, wherein the second data processing system receives a message from the hypervisor (passing messages over a communication network) ([0006]-[0007]).

14. Noel fails to explicitly wherein the message indicates to which of the plurality of operating system images the message belong, and wherein the second data processing system displays the message to a user with an indication of the operating system image corresponding to the message. However, Witzsch teaches a software coded message such as a request attached with identity codes (VMID) for transmission involving a hypervisor, wherein the identity codes help to identify and select between images within virtual machines or processing processors (*see Abstract*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of wherein the message indicates to which of the plurality of operating system images the message belong, and wherein the second data processing system displays the message to a user with an indication of the operating system image corresponding to the message to the existing messaging/requesting system of Noel because this would reduce complexity (*see Abstract*).

15. As to claim 24, Witzsch teaches wherein the data processing system (input/output system), responsive to operator input for a specified one of the plurality of operating system images, sends encapsulated data, comprising the operator input and an indication of the corresponding operating system image, to the hypervisor, and wherein the hypervisor decodes

Art Unit: 2195

the encapsulated data and sends the operator input to the corresponding operating system image (*see Abstract*).

### ***Response to Arguments***

16. During patent examination, the pending claims must be “given their broadest reasonable interpretation consistent with the specification.” *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

17. *Applicant argues on pages 12-13 of the Remarks that Weitzsch does not teach sending a message to a data processing system that indicates to which of the plurality of operating system images the message belong, and wherein the second data processing system displays the message to a user with an indication of the operating system image corresponding to the message.*

In response, Witzsch teaches a software coded message such as a request attached with identity codes (VMID) for transmission involving a hypervisor, wherein the identity codes help to identify and select between images within virtual machines or processing processors (*see Abstract*).

18. In response to applicant's argument on page 13 of the Remarks that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

Art Unit: 2195

combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, reducing complexity is the motivation to combine Witzsch with Noel.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



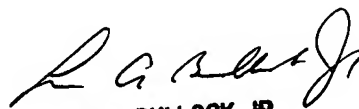
Art Unit: 2195

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt  
1/30/06

  
LEWIS A. BULLOCK, JR.  
PRIMARY EXAMINER